



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE
OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION
FOR THE ADVANCEMENT OF SCIENCE.

FRIDAY, JUNE 3, 1904.

CONTENTS:

Research in State Universities: PROFESSOR
ISRAEL C. RUSSELL..... 841

Scientific Books:—

*Ostwald's Grundlinien der anorganischen
Chemie:* PROFESSOR LOUIS KAHLENBERG.. 854

Societies and Academies:—

*The San Francisco Section of the American
Mathematical Society:* PROFESSOR G. A.
MILLER. *Minnesota Academy of Sciences:*
DR. H. GALE. *The Geological Society of
Washington:* ALFRED H. BROOKS. *The
Biological Society of Washington:* WILFRED
H. OSGOOD. *The Cornell Section of the
American Chemical Society:* WILLIAM C.
GEER. *Section of Geology and Mineralogy
of the New York Academy of Sciences:* DR.
EDMUND OTIS HOVEY..... 855

Discussion and Correspondence:—

The Metric System: PROFESSOR ARTHUR
GORDON WEBSTER. *Zoology and the Inter-
national Catalogue of Scientific Literature:*
DR. T. WAYLAND VAUGHAN. *Non-educat-
ion of the Young by Parents:* DR. THEO.
GILL. *Price of the Reports of the Harri-
man Expedition:* PROFESSOR ISRAEL C. RUS-
SEL 860

Special Articles:—

An Enemy of the Cotton Boll Weevil: O. F.
COOK. *Zygospore Formation a Sexual
Process:* ALBERT FRANCIS BLAKESLEE. *On
the Development of Palisade Tissue and
Resinous Deposits in Leaves:* EDGAR N.
TRANSEAU. *Albino Brook Trout:* C. R.
PETTIS 862

Botanical Notes:—

*Weeds used in Medicine; The Date Palm
in America; Woody Plants in Winter;* Dr.
Augustin Gattinger, Botanist: PROFESSOR
CHARLES E. BESSEY..... 868

Scientific Notes and News..... 869

University and Educational News..... 871

MSS. intended for publication and books, etc., intended
for review should be sent to the Editor of SCIENCE, Garri-
son-on-Hudson, N. Y.

RESEARCH IN STATE UNIVERSITIES.*

THE word research, as used by scientific men, signifies study systematically carried on for the purpose of discovering that which is unknown. It is the seeking for new facts, new forces, new laws and new ideas without direct reference to their utility.

The word *re*-search has been chosen to express this high aim, rather than the same root without the prefix, because in most instances explorations have to be repeated, experiments performed again and again, and the advances made in any direction scrutinized from many points of view before the conclusions reached are deemed worthy of acceptance.

The field of research is not restricted to the laboratory or the library, but is as wide as the universe. It includes the study of man as well as his environment. It is essential alike to the growth of industries and the development of philosophies.

Research, then, is the painstaking endeavor to increase the world's store of knowledge in any department of human thought.

The Scope of Research.—One of the most important results of the modern development of industries is the recognition of the fact that discovery is the mainspring of progress. This conclusion, although self-evident, does not seem to have received the recognition it deserves. The creed which needs to be repeated over and over again in the hearing of every intelligent human

* Read before the Research Club of the University of Michigan, January 20, 1904.